Alberta
OCCUPATIONAL HEALTH AND SAFETY

REPORT

LOST-TIME CLAIMS and CLAIM RATES

1990 SUMMARY

LOST-TIME CLAIMS AND CLAIM RATES

1990 SUMMARY

Research and Information Development
Planning and Research Branch
Alberta Occupational Health and Safety

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HIGHLIGHTS

Alberta Lost-Time Injury Rate	• remained unchanged in 1990 (4.97) compared to 1989 (4.95).
Major Industrial Sectors Injury Rates	• declined in Construction (- 6%) and in Manufacturing (-5%).
	• increased in Forestry (i.e., logging and reforestation) (+15%), Public Administration (+8%) and in Trade (+7%).
	• increase in Forestry, due to increases in both logging (+15%) and especially, re-forestation (+48%).
Highest Risk Sectors	• continue to be Forestry, Construction and Manufacturing.
Sub Industries Injury Rates	• decreased considerably in utilities construction (-28%), oil well drilling (-22%), roofing (-17), and painting and decorating (-15%).
	• increased considerably in liquor stores (+47%), plumbing and pipefitting (+32%), air services (+24%) and food stores (+20%).
Highest Risk Sub Industries	• continue to be meat and poultry packing, geo-seismic exploration, trucking and metal fabrication.
Types of Accidents	• most frequently occurring were overexertion (28%), bodily reaction (13%) and being struck by objects (11%).
Parts of Body	• most frequently injured were backs (28%) and fingers (11%).
Type of Injury	• most frequently occurring was sprains and strains (46%).
Injured Worker Characteristics	• 23% of injured workers were between 15 and 24 years old.
	• 29% had less than 6 months experience with their employer.
Days Lost	• 36% of injuries resulted in from 1 to 5 lost work days.
	• 17% resulted in more than 50 lost work days.

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LOST-TIME CLAIMS AND CLAIM RATES
1990 SUMMARY

1. INTRODUCTION

This report is a statistical summary of occupational injury and illness in Alberta. Estimations of the risk of injury or illness (the lost-time claim rates) in Alberta industries are reported, as well as statistical information regarding the injuries, the injury incident, and the injured workers. The report is intended as a general reference; more detailed information about specific industries, injuries, or incident types can be obtained from Research and Information Development, Alberta Occupational Health and Safety (Telephone: 403-427-8943).

This report summarizes lost-time claims submitted to and accepted by the Workers' Compensation Board (WCB) in 1990, along with estimated person-years worked and lost-time claim rates. Changes from 1989 figures are indicated. Claim rates for the whole province are described first, followed by information on the major industry groups and sub-industries.

Also included is a general description of lost-time claims in 1990. These claims are described in terms of (a) source of injury, (b) type of accident, (c) nature of injury, (d) part of body injured, (e) age and experience of injured workers, and (f) duration of disability.

2. PROVINCIAL TOTALS

The number of lost-time claims increased by 2.7% in 1990, while the estimated person-years worked increased by 2.2%; the result was an insignificant change in the lost-time claim rate in 1990 compared to 1989.

The following points summarize the lost-time claims and claim rates for the whole province for 1990 (see Table 2.1).

a) The estimated person-years worked in 1989 **increased** by 2.2%.

b) The number of employer WCB accounts **increased** by 3.6%.

c) The number of lost-time claims **increased** by 2.7%.

d) The lost-time claim rate (per 100 person-years) was 4.97, virtually unchanged from 1989.

The lost-time claim rate has been declining gradually since 1985, when the rate was 5.54 lost-time claims per 100 person-years.

TABLE 2.1

ESTIMATED PERSON-YEARS WORKED, EMPLOYER ACCOUNTS, LOST-TIME CLAIMS, AND LOST-TIME CLAIM RATES ALBERTA, 1989 - 1990

	1989	1990	Change
Estimated Person-Years[1,2]	855,747	874,525	+2.2%
Employer Accounts[3]	61,585	63,818	+3.6%
Lost-Time Claims[1,2]	42,342	43,470	+2.7%
Lost-Time Claim Rate[4]	4.95	4.97	+0.4%

Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Estimated person-years worked and lost-time claims for the Government of Canada are not included in these totals.

3 Accounts reporting assessable payroll to the WCB.

4 Claim rate = $\frac{\text{Lost-time claims x 100}}{\text{Estimated Person-years}}$

Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

3. MAJOR INDUSTRY SECTORS

Estimated person-years worked, number of lost-time claims, and lost-time claim rates for major industry sectors for 1989 and 1990 are contained in Table 3.1 and in Figure 1 and Figure 2.

a. **The person-years worked** estimates increased in most major industry sectors. The largest percent increases occurred in: forestry (+19.5%), and construction (+11.4%). Person-year estimates in the trade sector decreased slightly (-1.3%), and there were small increases in the other sectors.

b. **Lost-time claims** increased in several industry sectors. There was a 37% increase in forestry, a 6.7% increase in public administration, and a 5.6% increase in Trade. The only decreases occurred in manufacturing (-2.1%), and in oil and gas mines (-0.7%).

c. **Lost-time claim rates** in most major industry sectors changed very little in 1990 compared to 1989. The largest declines were in construction (-6%) and manufacturing (-5%). Forestry increased by 15% over the 1989 rate.

Each major industry sector consists of a wide variety of industries having a wide range of health and safety risks. For example, the oil, gas, and mines sector includes both the high hazard drilling, exploration, and servicing industries, and the low hazard operation and processing industries. The claim rates for sub-industries within each of the major sectors are described in the next section of this report.

TABLE 3.1

ESTIMATED PERSON-YEARS, LOST-TIME CLAIMS, AND LOST-TIME CLAIM RATES FOR MAJOR INDUSTRY SECTORS ALBERTA, 1989 - 1990

	1989	1990	Change
Forestry			
Person-Years[1]	1518	1814	+19.5%
Lost-Time Claims[1]	181	248	+37.0%
Lost-Time Claim Rate[2]	11.9	13.7	+15%
Construction			
Person-Years	61617	68615	+11.4%
Lost-Time Claims	6407	6707	+4.7%
Lost-Time Claim Rate	10.4	9.8	-6%
Manufacturing			
Person-Years	111369	114965	+3.2%
Lost-Time Claims	10215	10000	-2.1%
Lost-Time Claim Rate	9.2	8.7	-5%
Agriculture			
Person-Years[1]	4950	5189	+4.8%
Lost-Time Claims[1]	406	424	+4.4%
Lost-Time Claim Rate	8.2	8.2	0%
Transportation & Utilities			
Person-Years	77482	78726	+1.6%
Lost-Time Claims	4114	4262	+3.6%
Lost-Time Claim Rate	5.3	5.4	+2%
Trade			
Person-Years	167946	165710	-1.3%
Lost-Time Claims	7072	7465	+5.6%
Lost-Time claim Rate	4.2	4.5	+7%
Public Administration[3]	78277	78338	+0.1%
Person-Years	2922	3119	+6.7%
Lost-Time Claims	3.7	4.0	+8%
Lost-Time Claim Rate			

... 2/

	1989	1990	Change
Service			
Person-Years	282490	291247	+3.1%
Lost-Time Claims	9384	9608	+2.4%
Lost-Time Claim Rate	3.3	3.3	0%
Oil, Gas & Mines			
Person-Years	64559	65290	+1.1%
Lost-Time Claims	1631	1620	-0.7%
Lost-Time Claim Rate	2.5	2.5	0%

Notes:

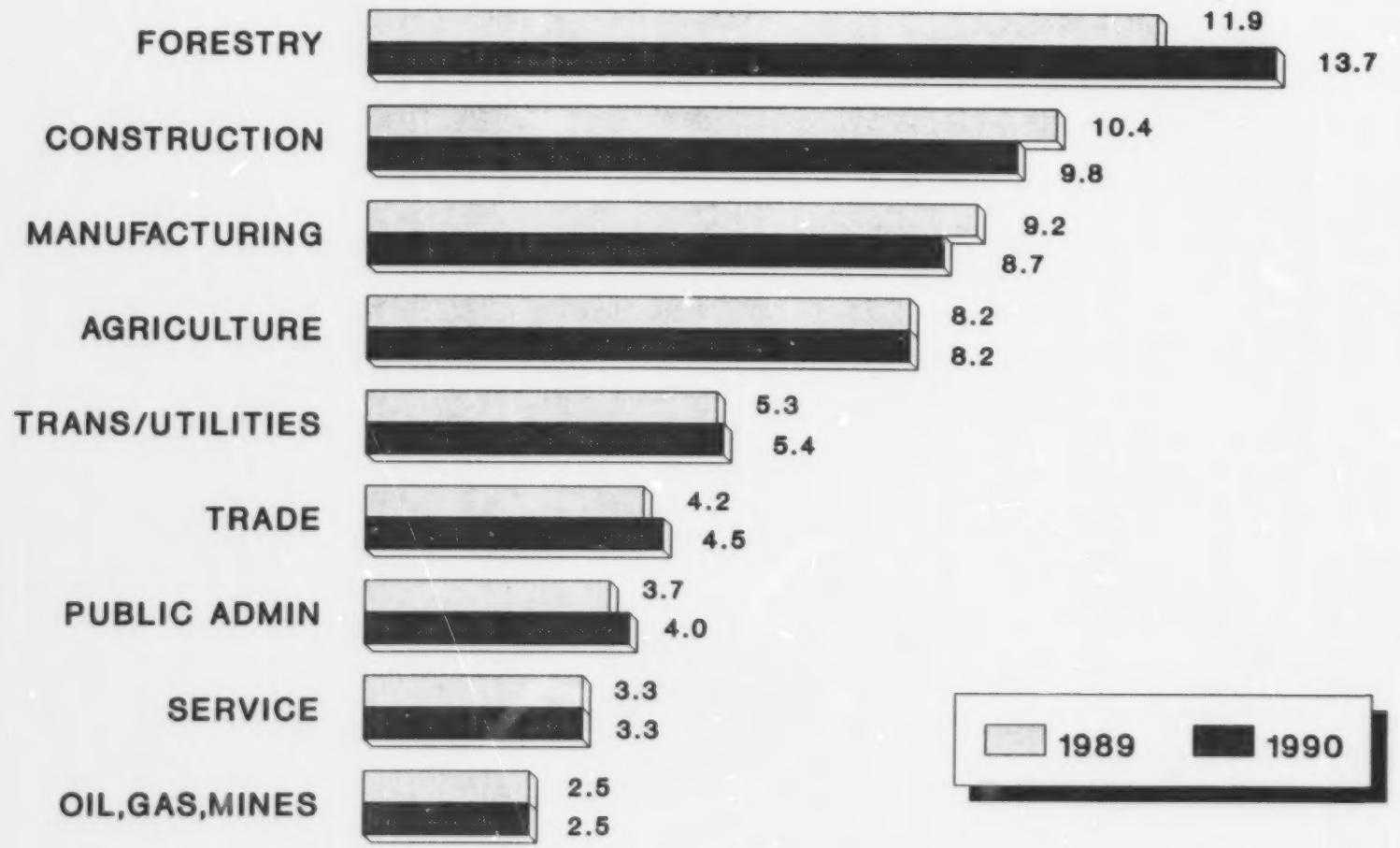
1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury. Estimates are based only on information about employers with WCB coverage. Only a small percentage of some industry sectors (for example, agriculture) have WCB coverage (see also Table 6.1).

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Estimated Person-years}} \times 100$

3 Estimated person-years worked and lost-time claims for the Government of Canada are not included in these totals. Person-year estimates for the Government of Alberta are based upon information from the Personnel Administration Office.

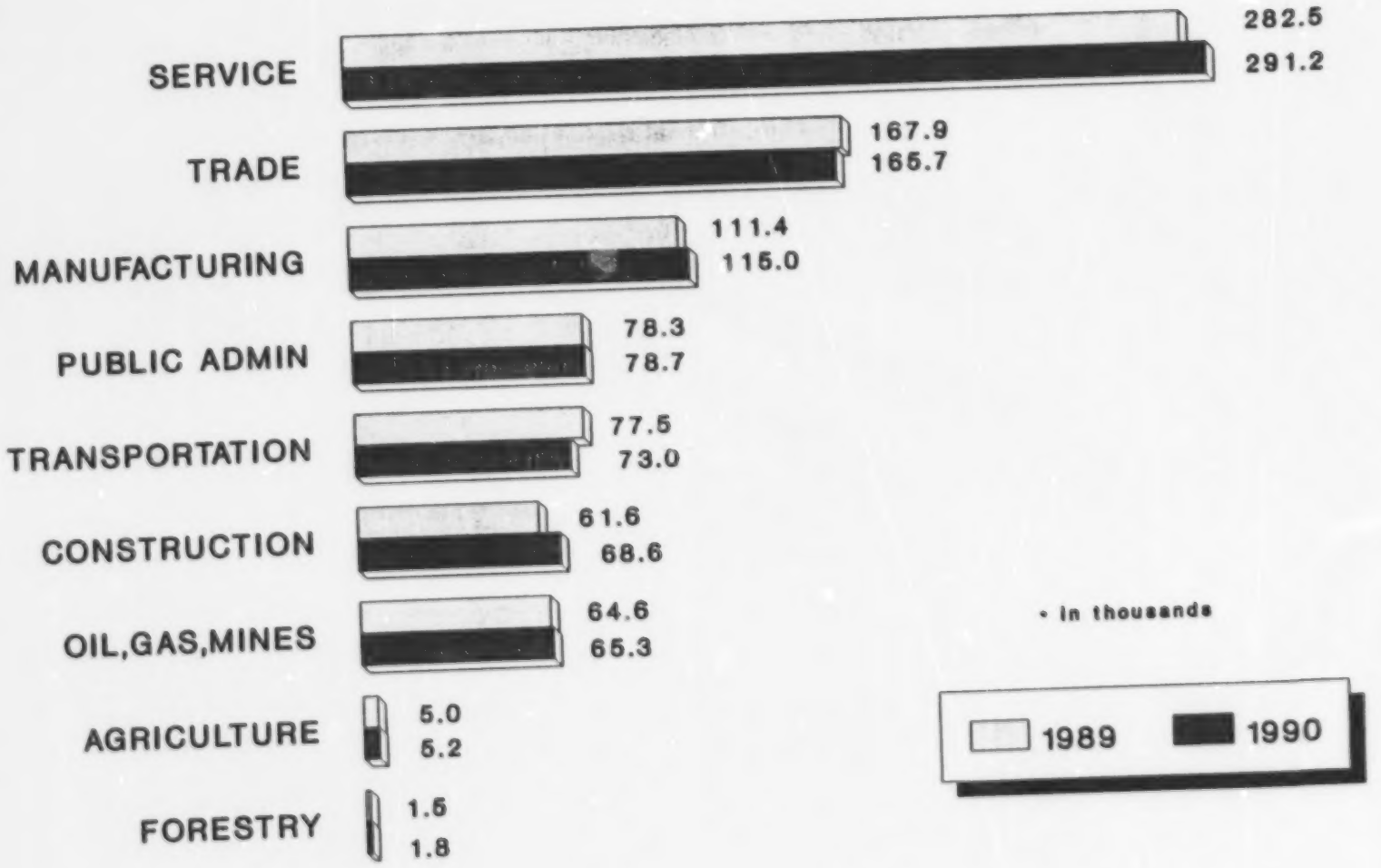
Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

FIGURE 1: CLAIM RATES
MAJOR INDUSTRIAL SECTORS
ALBERTA, 1989-1990
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY, JULY 1991

FIGURE 2: ESTIMATED PERSON-YEARS *
MAJOR INDUSTRIAL SECTORS
ALBERTA, 1989-1990



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY, JULY 1991

4. PERSON-YEAR ESTIMATES AND CLAIM RATES BY DETAILED INDUSTRY

Tables 4.1 to 4.7 contain person-year estimates and lost-time claim rates for selected sub-industries within the larger industry sectors listed in Table 3.1. The sub-industries selected for inclusion into these tables were chosen because (a) they represent a sizable portion of the industry sector, in terms of person-years worked, and (b) they illustrate the range of industries, and the corresponding range of lost-time claim rates, which are included within an industry sector.

4.1 Oil, Gas, and Mines

Very large differences in lost-time claim rates occurred between selected sub-industries within this industry group. Claim rates were high in exploration, moderate in drilling, and well servicing, and low in the operation and processing industries (see Table 4.1 and Figure 3). Coal mining and the tar sands had relatively low lost-time claim rates.

1989 versus 1990

a) Person-year estimates: Person-year estimates either increased slightly or did not change in most oil and gas industries. The only decrease in employment occurred in exploration (-9%).

b) Lost-time claim rates: Lost-time claim rates increased slightly in exploration (from 17.1 to 18.0), coal mining (2.6 to 3.2), and oilfield services (5.0 to 5.5), and remained steady in the tar sands, and oil and gas operations. However, claim rates were substantially lower in well servicing (from 8.9 to 7.7), and oil well drilling (from 7.1 to 5.3).

4.2 Manufacturing

The meat and poultry packing industry again had a particularly high claim rate (26.0), which was a small decrease over the 1989 rate of 26.9. There were relatively high claim rates as well in the fabrication and manufacture of metal products industry, the food and beverage industry, and the wood products industry.

Low claim rates occurred in printing and publishing, and in the petro-chemical industries (see Table 4.2 and Figure 4).

1989 versus 1990

a) Person-year estimates: Person-year estimates increased in several manufacturing industries, with the greatest increases occurring in wood and building products (+6.5%), meat and poultry packing (6.9%), and petro-chemical (+8.8%).

b) Lost-time claim rates: Lost-time claim rates in 1990 decreased in most manufacturing industries, but only by small amounts. The greatest improvement was in wood and building products (-1.1). Claim rates increased for the second year in a row in non-metallic minerals (+0.7).

4.3 Construction

Among the major construction industry groups, the highest claim rate in 1990 was for construction trades (10.3), followed closely by construction of buildings (10.2). The lowest rate was for construction of utilities (7.6). Among the special trades, roofing, sheet metal, concrete, and drywall construction trades had the highest lost-time claim rates (see Table 4.3 and Figures 5 and 6).

1989 versus 1990

a) Person-year estimates: Person-year estimates increased for the construction of buildings (19.1%), and roads and bridges (20.9%) and in the construction trades (5.5%).

b) Lost-time claim rates: The lost-time claim rates in the construction industries have declined in every major group except in construction trades, which increased very slightly. Claim rates declined in several special trades; particularly large decreases occurred in roofing (-3.7) and concrete (-1.5). There were increases in plumbing (+2.5) and electrical (+0.9).

4.4 Trade

The trade industry includes small retail stores (e.g., jewellery stores) with very low lost-time claim rates (1.8) and the automobile repair industry, with a claim rate of 5.8. Food stores had the highest claim rate in the trade sector (8.9 in 1990; see Table 4.4 and Figure 7).

1989 versus 1990

a) Person-year estimates: Person-year estimates declined in most trade sub-industries. The only increases occurred in furniture and appliance stores (6.2%), and automotive (7.5%).

b) Lost-time claim rates: Claim rates increased in several trade industries, especially in food stores (from 7.4 to 8.9), and liquor stores (from 3.2 to 4.7). In 1990 food stores had a higher injury risk than most oilfield activities (compare with Table 4.1).

4.5 Transportation and Utilities

The trucking industry was the major source of lost-time claims in this sector, accounting for 60% of the total claims, but only 23% of the person-years. Within this sector, air transportation services had a moderate claim rate, and the claim rates within the railway, utilities and communications industries were quite low (see Table 4.5 and Figure 8).

1989 versus 1990

a) Person-year estimates: The largest increases in activity were evident in the telecommunications (20%), and pipeline operations (5.1%) industries.

b) Lost-time claim rates: The lost-time claim rates decreased or remained unchanged in most sub-industries in this sector in 1990 compared to 1989 levels. The only increase was in air services (from 4.9 to 6.1).

4.6 Service

Claim rates for all sub-industries in this sector were below the provincial average, except in the care of the young, old, and infirm, which had the highest claim rate (5.3). Low rates in this industry sector occurred in the education (1.7) and engineering (1.3) industries (see Table 4.6 and Figure 9).

1989 versus 1990

a) Person-year estimates: Person-year estimates for several sub-industries increased in 1990. Engineering increased 11.8%, care of young, old & infirm increased 7.5%, and sports and entertainment increased 7.0%. Small decreases occurred in personal services (-4.0%) and business services (-3.1%).

b) Lost-time claim rates: Lost-time claim rates in the service sub-industries changed only slightly in 1990 compared to 1989 levels.

4.7 Public Administration

Sub-industries in this sector include the provincial government, provincial boards and agencies, and the various levels of local government. Claim rates in these sub-industries are generally near or below the provincial average.

1989 versus 1990

a) Person-year estimates: There was a 17.3% increase in boards and agencies, and a 12.2% increase in towns and villages.

b) Lost-time claim rates: Claim rates in this sector increased in the cities (from 5.7 to 6.1), in counties and municipalities (from 4.7 to 5.2), and towns and villages (from 3.9 to 4.2). The lost-time claim rate for the provincial government also increased from 2.3 to 2.6 lost-time claims per 100 person-years.

TABLE 4.1

ESTIMATED PERSON-YEARS AND CLAIM RATES
OIL, GAS, AND MINES SUB-INDUSTRIES
ALBERTA, 1989 - 1990

	Person Years[1]		Claim Rate[2]	
Industry	1989	1990	1989	1990
Oil and gas exploration	1706	1554	17.1	18.0
Well servicing	2277	2513	8.9	7.7
Well drilling	3405	3686	7.1	5.5
Other oilfield services	10284	10019	5.0	5.5
Coal mining	2860	2979	2.6	3.2
Tar sands	6812	7268	1.2	1.2
Operation of gas plants and oil wells	36359	36327	0.4	0.4

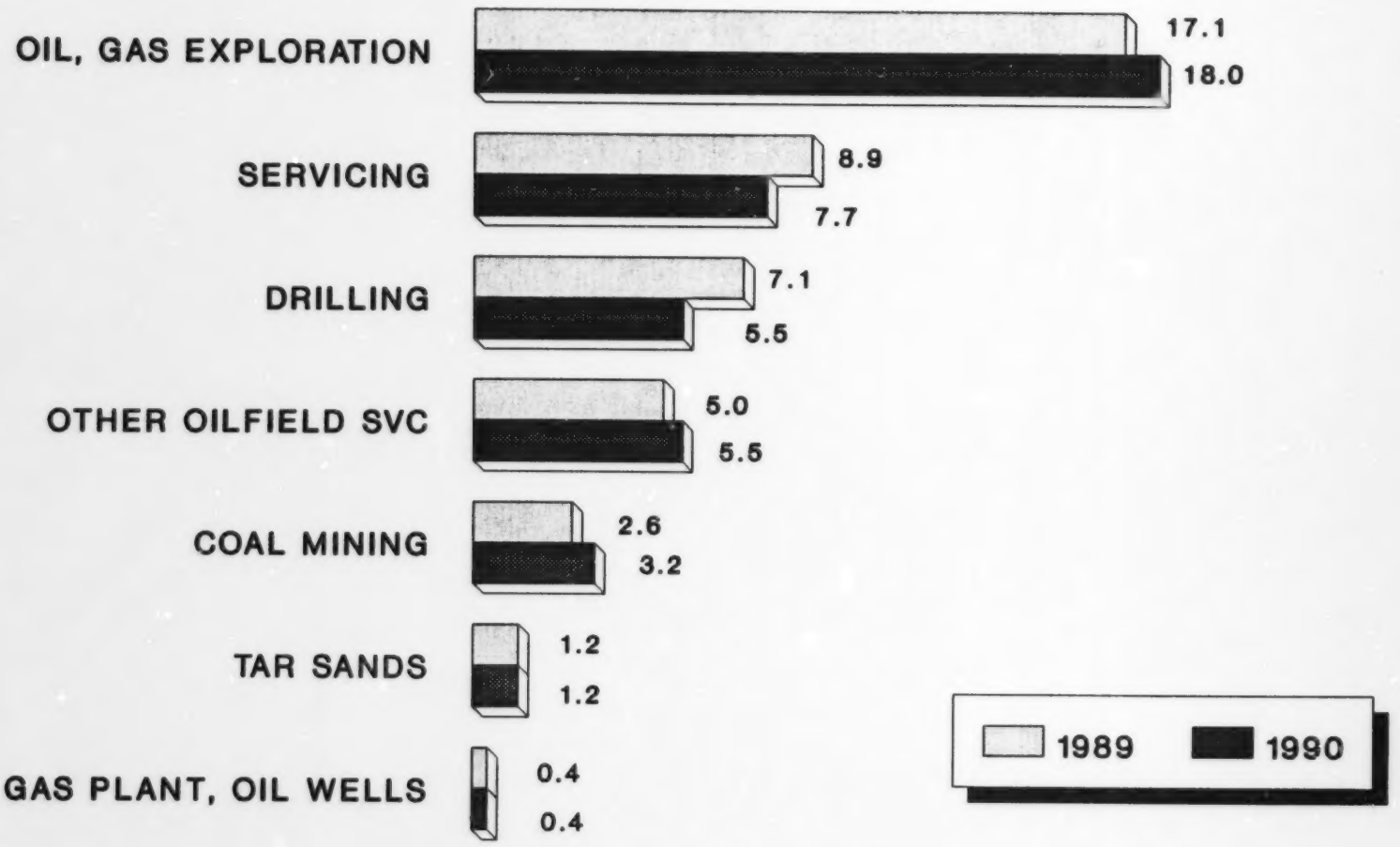
Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

FIGURE 3: CLAIM RATES
OIL, GAS, AND MINES SUB-INDUSTRIES
ALBERTA, 1989-1990
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY, JULY 1991

TABLE 4.2

ESTIMATED PERSON-YEARS AND CLAIM RATES MANUFACTURING SUB-INDUSTRIES ALBERTA, 1989 - 1990

	Person Years[1]		Claim Rate[2]	
Industry	1989	1990	1989	1990
Meat and poultry packing	6051	6467	26.9	26.0
Metal products	25802	25903	14.2	14.1
Wood and building products	18126	19311	11.5	10.4
Food and beverage	11157	11145	10.4	10.0
Non-metallic minerals	4980	4599	6.5	7.2
Printing and publishing	10897	10937	2.8	2.7
Petro-chemical	17624	19174	2.4	2.1

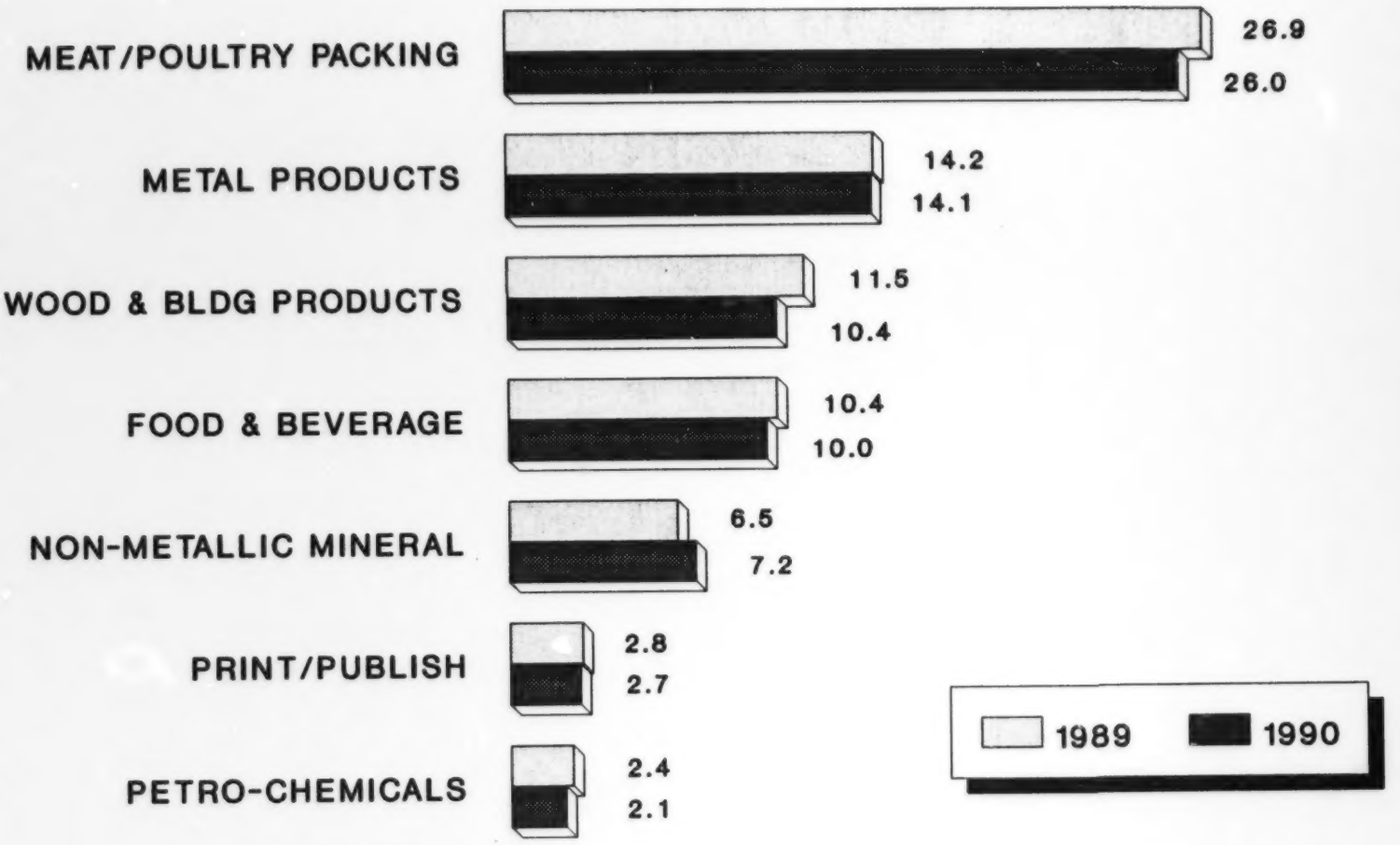
Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

FIGURE 4: CLAIM RATES
MANUFACTURING SUB-INDUSTRIES
ALBERTA, 1989-1990
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
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TABLE 4.3

ESTIMATED PERSON-YEARS AND CLAIM RATES CONSTRUCTION SUB-INDUSTRIES ALBERTA, 1989 - 1990

	Person Years[1]		Claim Rate[2]	
Industry	1989	1990	1989	1990
Special trades	32461	34245	10.0	10.3
Roofing	1170	1346	22.0	18.3
Sheet metal	1365	1455	18.4	17.9
Concrete	1165	1335	15.7	14.2
Drywall	1612	2002	13.4	12.5
Plumbing	3436	3220	7.9	10.4
Painting	1662	1945	9.7	8.2
Electrical	5729	5779	6.6	7.5
Buildings	16329	19453	11.9	10.2
Roads, bridges	9942	12016	9.3	8.1
Utilities	2885	2901	10.5	7.6

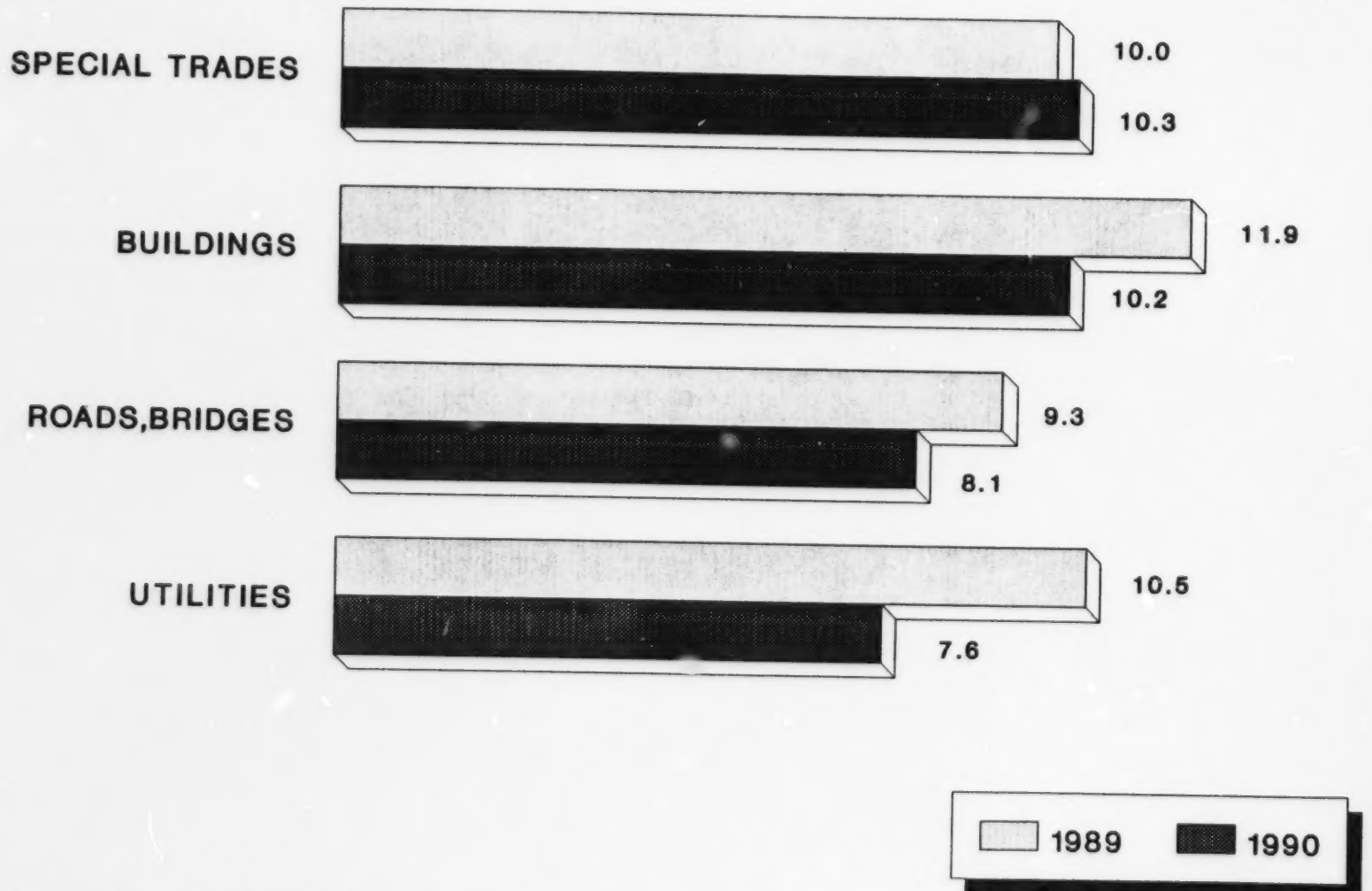
Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

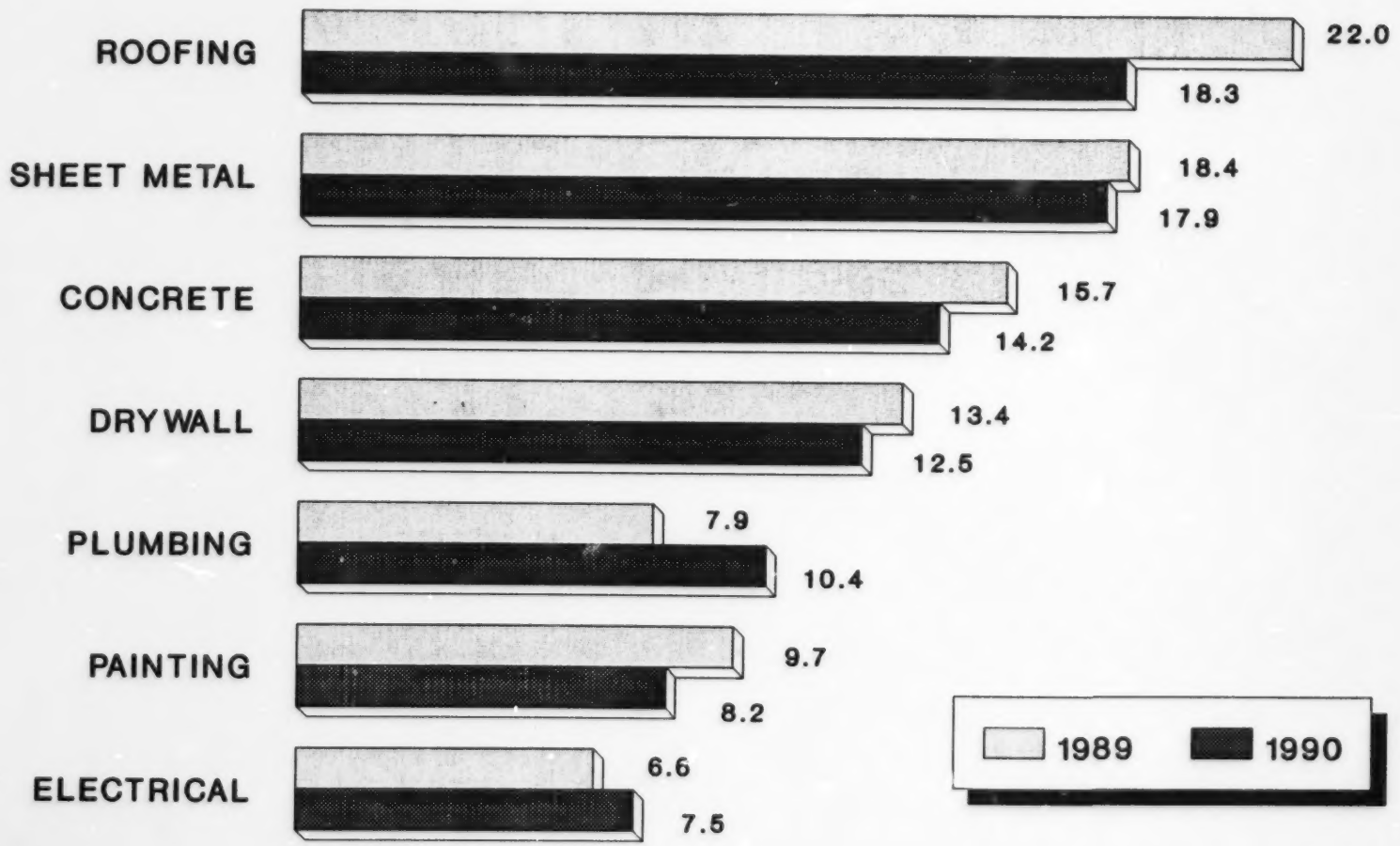
Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

FIGURE 5: CLAIM RATES
CONSTRUCTION SUB-INDUSTRIES
ALBERTA, 1989-1990
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY, JULY 1991

FIGURE 6: CLAIM RATES
CONSTRUCTION SPECIAL TRADES
ALBERTA, 1989-1990
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
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TABLE 4.4

ESTIMATED PERSON-YEARS AND CLAIM RATES
TRADE SUB-INDUSTRIES
ALBERTA, 1989 - 1990

	Person Years[1]		Claim Rate[2]	
Industry	1989	1990	1989	1990
Food stores	19279	17698	7.4	8.9
Automotive	28256	30367	5.8	5.8
Liquor stores	2460	2425	3.2	4.7
Warehouse, wholesale	25473	24592	4.5	4.6
Department stores	23205	22165	4.0	4.3
Furniture, appliances	6000	6373	3.4	3.5
Machine sales, service	11763	11865	2.6	2.7
Other retail	42806	41744	1.7	1.8

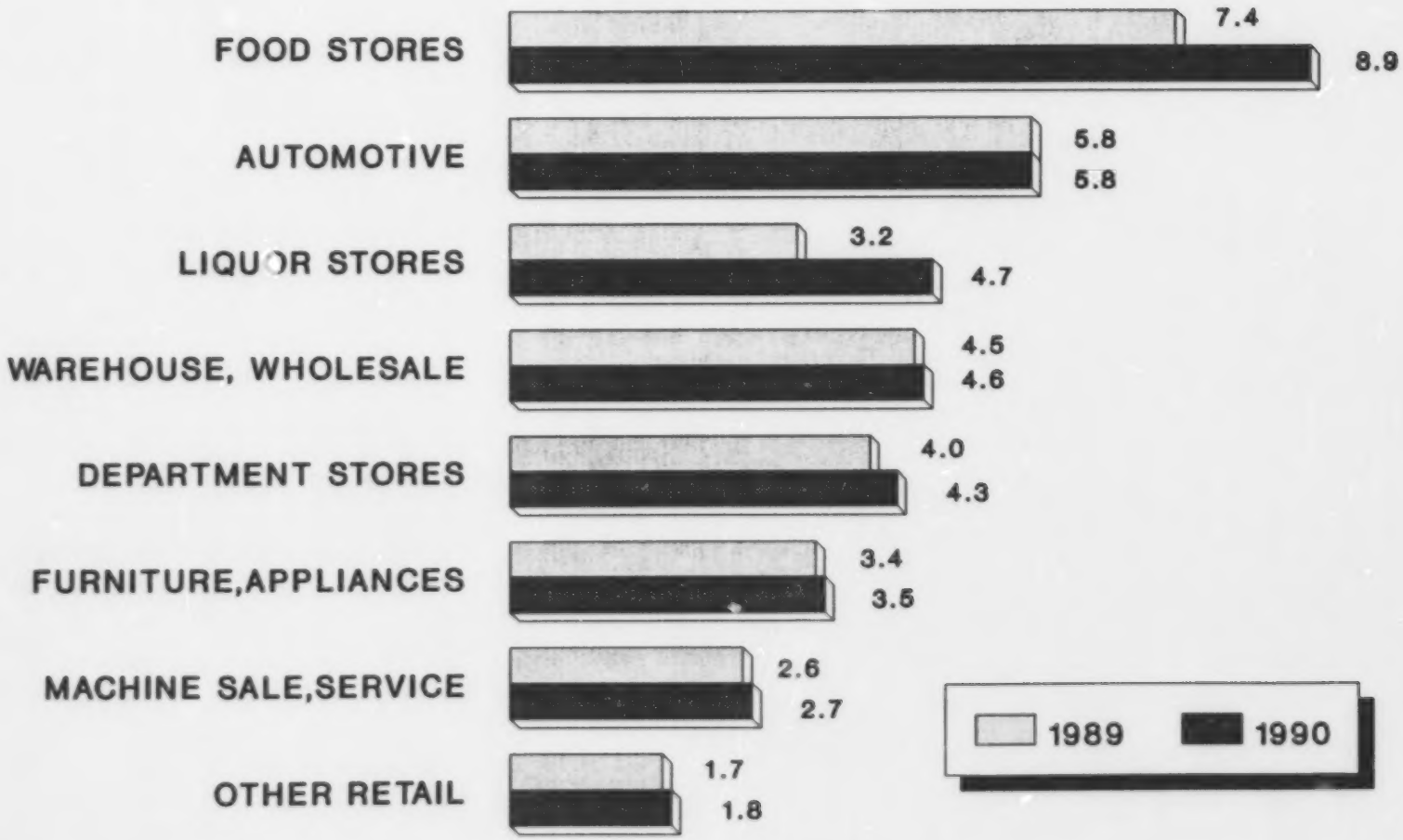
Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

FIGURE 7: CLAIM RATES
TRADE SUB-INDUSTRIES
ALBERTA, 1989-1990
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY, JULY 1991

TABLE 4.5

ESTIMATED PERSON-YEARS AND CLAIM RATES TRANSPORTATION AND UTILITIES SUB-INDUSTRIES ALBERTA, 1989 - 1990

	Person Years[1]		Claim Rate[2]	
Industry	1989	1990	1989	1990
Trucking	17828	17918	14.2	14.3
Air services	6334	6186	4.9	6.1
Gas distribution	3713	3695	2.6	2.1
Radio, television	3529	3489	1.0	1.6
Railways	12198	10397	1.6	1.5
Telecommunications	11975	14376	1.2	1.3
Electric power	4782	5063	1.1	1.3
Pipeline operation	7467	7848	1.3	1.2

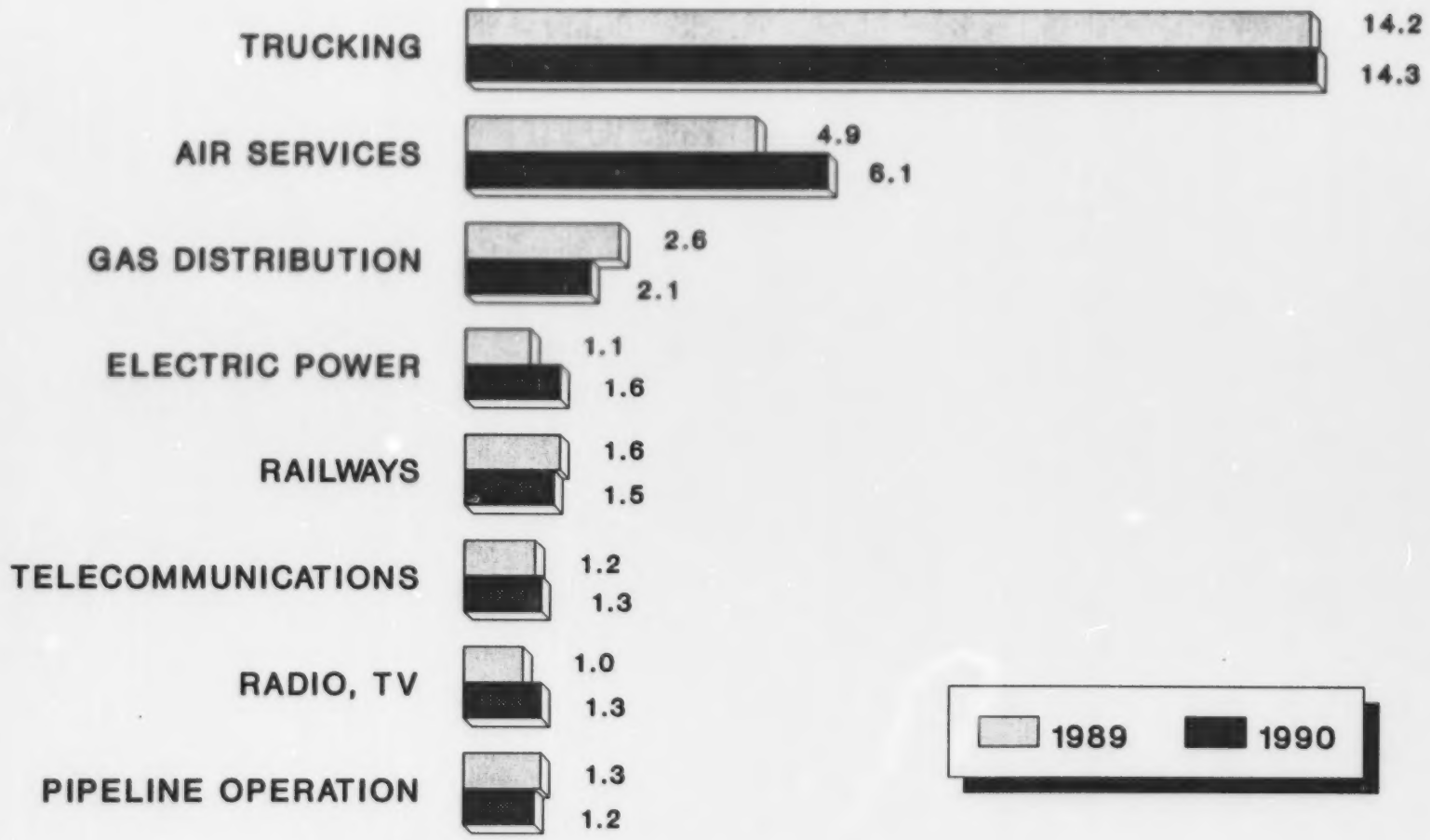
Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

FIGURE 8: CLAIM RATES
TRANSPORTATION & UTILITIES SUB-INDUSTRIES
ALBERTA, 1989-1990
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
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TABLE 4.6

ESTIMATED PERSON-YEARS AND CLAIM RATES
SERVICE SUB-INDUSTRIES
ALBERTA, 1989 - 1990

	Person Years[1]		Claim Rate[2]	
Industry	1989	1990	1989	1990
Care of young, old, and infirm	22998	24719	4.9	5.3
Hotels, restaurants	65159	68587	4.3	4.1
Hospitals	52277	54024	4.1	4.0
Building maintenance	15066	15115	3.5	3.3
Sports, entertainment	7618	8150	3.4	3.3
Personal services	8087	7760	2.6	2.9
Business services	12150	11778	2.5	2.4
Education	52811	53568	1.6	1.7
Engineering	12150	13579	1.3	1.3

Notes:

1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

FIGURE 9: CLAIM RATES
SERVICE SUB-INDUSTRIES
ALBERTA, 1989-1990
(Rate/100 Person-Years)

SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY, JULY 1991

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TABLE 4.7

ESTIMATED PERSON-YEARS AND CLAIM RATES
PUBLIC ADMINISTRATION SUB-INDUSTRIES
ALBERTA, 1989 - 1990

	Person Years[1]		Claim Rate[2]	
Industry	1989	1990	1989	1990
Cities	28817	27122	5.7	6.1
County, Municipality	3803	3745	4.7	5.2
Towns, villages	3454	3877	3.9	4.2
Other local government	1228	1439	2.4	2.6
Alberta Government[3]	37286	37693	2.3	2.6
Government boards and agencies	3656	4289	0.5	0.8

Notes:

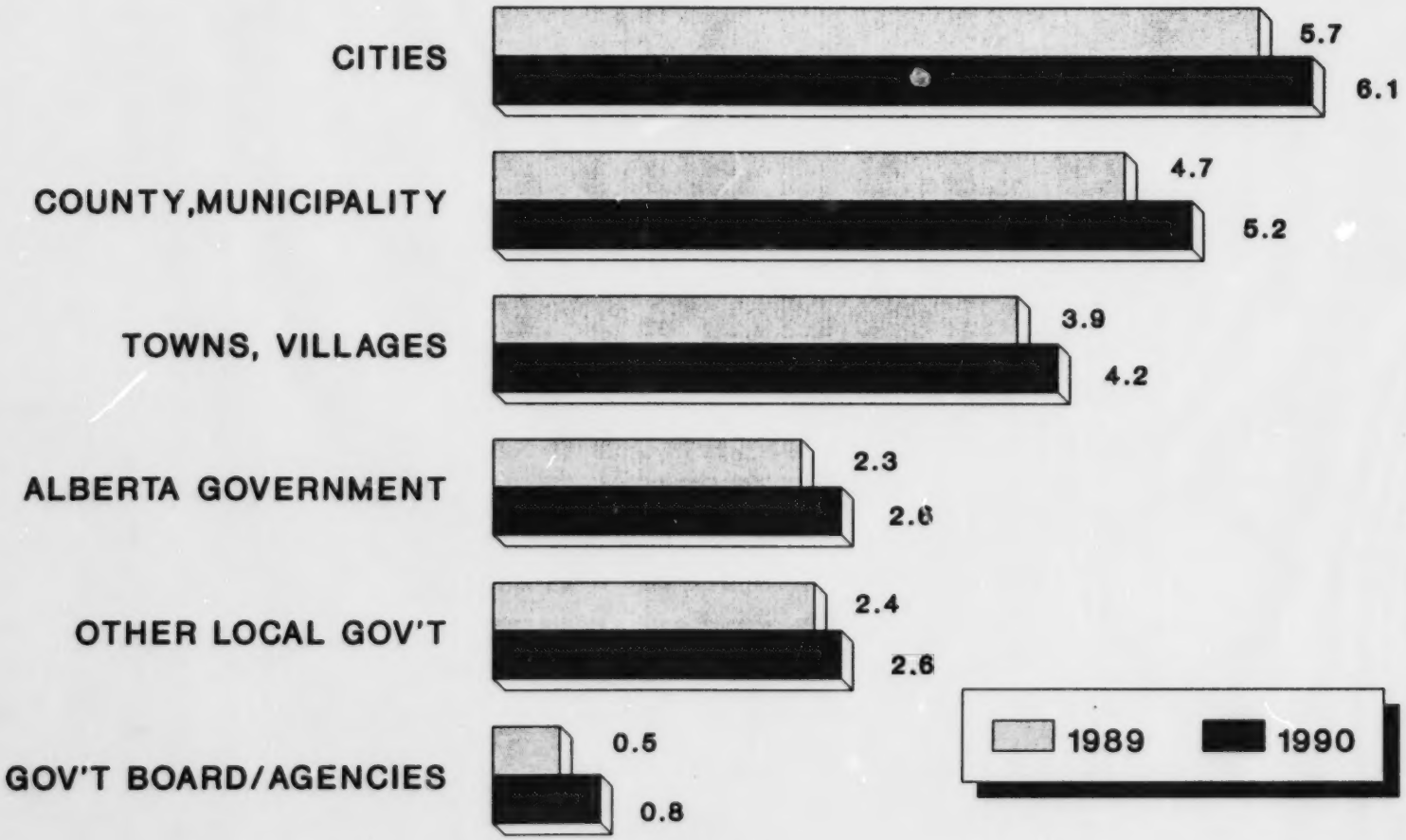
1 Estimated person-years are calculated from wage and payroll data submitted to the WCB. Lost-time claims result in absence from work beyond the day of the injury.

2 Claim rate = $\frac{\text{Lost-time claims}}{\text{Person-Years}} \times 100$

3 Person-year estimates for Government of Alberta are based upon information from the Personnel Administration Office.

Source: Occupational Health and Safety Annual Injury Rate Report: 1989, 1990.

FIGURE 10 CLAIM RATES
PUBLIC ADMINISTRATION SUB-INDUSTRIES
ALBERTA, 1989-1990
(Rate/100 Person-Years)



SOURCE: RESEARCH & INFORMATION DEVELOPMENT
ALBERTA OCCUPATIONAL HEALTH & SAFETY, JULY 1991

5. DESCRIPTION OF LOST-TIME CLAIMS; 1989, 1990

In this section, lost-time claims are described in terms of (a) source of injury, (b) type of accident, (c) nature of injury, and (d) part of body injured. The percent distribution of 1990 claims is compared with the distribution of claims in 1989, when possible. Note, however, that due to claims coding changes, which occurred in 1990, some comparisons between 1989 and 1990 will not be meaningful. The high number of uncoded claims in 1990 also makes comparisons difficult.

In addition, some information regarding the age, sex, and experience of injured workers is included, as well as statistics on the duration of the disability (days compensation).

The total number of claims described in these tables is more than the total described in Table 2.1. This occurs because some claims (e.g. Government of Canada) are not used to calculate claim rates, but are included in the following tables.

5.1 Source of Injury

The four most frequent sources of injury in 1990 were *working surfaces* (12.8%), *bodily motion* (12.7%), *metal items* (11.1%), and *boxes and containers* (10.0%). accounting for almost half of all lost-time claims. The distribution of claims according to source of injury has changed very little since 1989 (see Table 5.1), except that injuries due to metal items have increased while injuries due to working surfaces, and boxes and containers, have declined.

5.2 Accident Type

The three most frequent types of accidents in 1990 involved *overexertion* (28.2%), *bodily reaction* (12.7%), and *struck by* an object (11.3%). The distribution of claims according to accident type has changed very little except, *falls of both types* decreased in 1990, and being struck by an object also decreased a great deal. These changes, however, may reflect coding changes rather than real changes in accident type.

5.3 Nature of Injury

Sprains and strains accounted for 45.7% of claims, followed by *bruises and crushing* (11.3%), and *cuts and lacerations* (10.0%). The changes in the frequency of multiple injury claims is probably due to a stricter coding criteria in 1990. The improved coding system has also permitted much greater detail in reporting occupational illnesses (see Table 5.3).

5.4 Part of Body

The most frequently injured body parts in 1990 were the back (28.1%), fingers (11.3%), other trunk (10.1%), and ankle or foot (9.1%). The distribution of lost-time claims by part of body injured changed very little between 1989 and 1990 (see Table 5.4).

5.5 Injured Worker Characteristics

Men accounted for 76% of lost-time claims in 1990, about 1% lower than in 1989. Conversely, there was a 1% increase in the proportion of claims by women in 1990.

In 1990 about 23% of claimants were young (15-24 years), and 36% were aged 25-34 (see Table 5.5). Changes from 1989 reflect a gradually aging labour force. Lost-time claim rates for different age groups show that the 20-24 year age group had the highest rate (5.2), followed by the 25-44 year age group (4.4). These rates are based upon employment data from Statistics Canada, and not on AOHS man-years, and therefore cannot be compared directly with other claim rates in this report.

29% of injured workers had worked less than 6 months for their current employer and 44.7% had worked for more than one year (see Table 5.5).

5.6 Days Lost

The majority of injuries and illnesses disable workers only for short time periods. In 1990, 36% of claims were for 5 or fewer work days lost, and 16% were for between 6 and 10 days lost. Lengthy disabilities (more than 50 days lost) accounted for almost 17% of all lost-time claims in 1990. Compared to 1989, there were somewhat more long duration injuries and fewer short duration injuries reported to and accepted by the WCB in 1990.

TABLE 5.1

LOST-TIME CLAIMS
SOURCE OF INJURY
ALBERTA, 1989 - 1990

	Number[1]		Percent	
Source	1989	1990	1989	1990
Working surfaces	5985	5689	13.8	12.8
Bodily motion	5472	5655	12.6	12.7
Metal items	4416	4951	10.2	11.1
Boxes, containers	4711	4424	10.9	10.0
Vehicles	3165	3024	7.3	6.8
Unpowered handtool	2544	2263	5.9	5.1
Machines	2201	2016	5.1	4.5
Persons	1747	1958	4.0	4.4
Wood items	1276	1520	2.9	3.4
Furniture, fixtures	1272	1399	2.9	3.1
Buildings, structures	958	766	2.2	1.7
Powered handtool	783	751	1.8	1.7
Meat and food products	436	598	1.0	1.3
Chemicals	496	501	1.1	1.1
Electrical apparatus	576	472	1.3	1.1
Hoisting apparatus	439	395	1.0	0.9
Particles	369	331	0.9	0.7
Glass items	324	307	0.7	0.7
Mechanical power apparatus	314	253	0.7	0.6
Boilers, pressure vessels	261	237	0.6	0.5
Plants, trees	283	232	0.7	0.5
Water, liquids	435	224	1.0	0.5
Animals, animal products	237	215	0.5	0.5
Flame, fire, smoke	178	194	0.4	0.4
Mineral items	195	185	0.4	0.4
Radiation, electric arc	224	184	0.5	0.4
Ladders	140	135	0.3	0.3
Coal, petroleum products	142	122	0.3	0.3
Conveyors	129	121	0.3	0.3
Other, unclassified	2888	2053	6.7	4.6
Unknown, not coded	757	3271	1.7	7.4
TOTAL	43353	44446	100.0	100.0

Note:

1 Lost-time claims result in absence from work beyond the day of the injury.

Source: Research and Information Development, AOHS; June 1991.

TABLE 5.2

LOST-TIME CLAIMS
TYPE OF ACCIDENT
ALBERTA, 1989 - 1990

Type of Accident	Number[1]		Percent	
	1989	1990	1989	1990
Overexertion	12341	12515	28.5	28.2
Bodily reaction	5469	5645	12.6	12.7
Struck by	7127	5123	16.4	11.3
Fall on same level	3637	3406	8.4	7.7
Fall from elevation	3595	3297	8.3	7.4
Caught between	3084	3198	7.1	7.2
Rubbed, abraded	1408	2634	3.2	5.9
Struck against	2430	2237	5.6	5.0
Vehicle accident	1177	1095	2.8	2.5
Temperature extreme	1177	998	2.7	2.2
Toxic substance	939	901	2.2	2.0
Violence	354	336	0.8	0.8
Other, unknown	615	3061	1.4	6.9
TOTAL	43353	44446	100.0	100.0

Note:

1 Lost-time claims result in absence from work beyond the day of the injury.

Source: Research and Information Development, AOHS; June 1991.

TABLE 5.3

LOST-TIME CLAIMS
NATURE OF INJURY
ALBERTA, 1989 - 1990

	Number[1]		Percent	
Nature of Injury	1989	1990	1989	1990
Sprain, strain	19921	20295	46.0	45.7
Bruise, crush	4547	5026	10.5	11.3
Cut, laceration	5011	4454	11.6	10.0
Dislocation, fracture	2858	3183	6.6	7.2
Multiple injury*	4205	2812	9.7	6.3
Inflammation of joints, tendons	1687	1911	3.9	4.3
Scratch, abrasion	1503	1515	3.5	3.4
Other injury	1411	1208	3.2	2.7
Other disease*	573	990	1.3	2.2
Burn, scald	1050	979	2.4	2.2
Chemical burn	353	345	0.8	0.8
Nervous System disease*	-	256	-	0.6
Radiation	209	175	0.5	0.4
Non-personal damage	25	17	0.1	0.0
Unknown, not coded	-	1280	-	2.9
TOTAL	43353	44446	100.0	100.0

Note:

1 Lost-time claims result in absence from work beyond the day of the injury.

* change in definition from 1989

Source: Research and Information Development, AOHS; June 1991.

TABLE 5.4

LOST-TIME CLAIMS
PART OF BODY INJURED
ALBERTA, 1989 - 1990

	Number[1]		Percent	
Part of Body	1989	1990	1989	1990
Back	11607	12486	26.8	28.1
Fingers	5233	5016	12.1	11.3
Other trunk	4136	4504	9.5	10.1
Ankle, foot	3952	4059	9.1	9.1
Multiple parts	3879	3790	8.9	8.5
Wrist, hand	3295	3531	7.6	7.9
Leg	3472	3464	8.0	7.8
Eyes	1942	1908	4.5	4.3
Arm	1879	1905	4.3	4.3
Head, neck	1178	1378	2.7	3.1
Toes	660	632	1.5	1.4
Multiple upper	882	614	2.0	1.4
Multiple lower	524	418	1.2	0.9
Face	354	338	0.8	0.8
Body systems	164	195	0.4	0.4
Respiratory system	149	147	0.3	0.3
Other, unknown	47	64	0.1	0.1
TOTAL	43353	44446	100.0	100.0

Note:

1 Lost-time claims result in absence from work beyond the day of the injury.

Source: Research & Information Development; AOHS, June 1991.

TABLE 5.5

AGE AND EXPERIENCE OF INJURED WORKERS
ALBERTA, 1989 - 1990

	1989		1990	
A. AGE	# [1]	%	#	%
15 - 19	3140	7.2	3105	7.0
20 - 24	7327	16.9	7147	16.1
25 - 34	16286	37.6	16213	36.5
35 - 44	8999	20.8	9824	22.1
45 - 54	4971	11.5	5305	11.9
55 +	2484	5.7	2722	6.1
Unknown	146	0.3	130	0.3
TOTAL	43353	100.0	44446	100.0

	1989		1990	
B. EXPERIENCE[2]	#	%	#	%
0 - 1 month	4118	9.5	4201	9.5
1 - 6 months	8732	20.1	8720	19.6
6 months - 1 year	4314	10.0	4577	10.3
More than 1 year	19214	44.3	19852	44.7
Unknown	6975	16.1	7096	16.0
TOTAL	43353	100.0	44446	100.0

Note:

1 Number of lost-time claims.

2 Experience refers to length of time with the current employer.

Source: Research and Information Development, AOHS; June 1991.

TABLE 5.6

DAYS LOST DUE TO OCCUPATIONAL INJURIES AND ILLNESS
ALBERTA, 1989 - 1990

	1989		1990	
Days Lost[1]	# [2]	%	#	%
0, Unknown	1712	3.9	2006	4.5
1 - 5	16194	37.4	15851	35.7
6 - 10	7286	16.8	7261	16.3
11 - 15	3689	8.5	3694	8.3
16 - 20	2129	4.9	2243	5.0
21 - 30	2702	6.2	2731	6.1
31 - 40	1909	4.4	1866	4.2
41 - 50	1258	2.9	1356	3.1
51 +	6474	14.8	7438	16.7
TOTAL	43353	100.0	44446	100.0

Note:

1 Days lost have been accumulated through to March 31, 1991. While many claims in the 51 + days lost category will continue to accumulate days lost, the percent of claims in this category will not change by very much.

2 Number of lost-time claims.

Source: Research and Information Development, AOHS; June 1991.

6. ALBERTA LABOUR FORCE STATISTICS, AND WORKERS' COMPENSATION BOARD COVERAGE, 1990

Table 6.1 contains information about the employed labour force in Alberta for 1989 and 1990, as estimated by Statistics Canada and published by Alberta Bureau of Statistics. These figures show an increase of 1.4% in the employed work force from 1989 to 1990. The largest increases in the employed labour force occurred in the construction (9.2%) and primary resource (9.0%) industries. A decrease of 13.0% occurred in public administration.

Table 6.1 also includes estimates of the size of the Alberta work force covered by WCB. Overall, it is estimated that 76% of the employed labour force in Alberta was covered by the Workers' Compensation Board in 1990 (unchanged from 1989).

The employment figures from Statistics Canada cannot be compared directly with AOHS person-years estimates because:

a) industry definitions differ;

b) some employers within an industry do not have WCB coverage;

c) person-year estimates will be low, by comparison with Statistics Canada employment data, for industries in which there is considerable part-time employment or frequent layoffs; and

d) person-year estimates cannot be calculated for industries that do not submit payroll data to WCB.

TABLE 6.1

ALBERTA LABOUR FORCE AND WCB COVERAGE BY INDUSTRY 1989 - 1990

Industry	Employed Labour Force ('000) 1989	1990	Change (%)	WCB Coverage[1] 1989 ('000)
Service	419	429	+2.4	284
Trade	215	222	+3.3	222
Manufacturing	97	94	-3.1	94
Transport & Utilities	96	91	-5.2	91
Public Administration	92	80	-13.0	80
Agriculture	88	93	+5.7	2
Construction	76	83	+9.2	83
Primary Resource	67	73	+9.0	71
Finance	63	65	+3.2	6
TOTAL	1214	1231	+1.4%	933

Note:

1 Percent coverage estimates from 1978 WCB Historical Series were used to calculate WCB coverage for 1990.

Source: Statistics Canada Catalogue # 71-001, and the Alberta Bureau of Statistics.

APPENDIX

DEFINITION OF INDUSTRY BY S.I.C. (1960)

Forestry	03100-03904
Well drilling	09600
Well servicing	09903
Oil and gas exploration	09200-09201
Other oilfield services	06304-06306, 09400, 09900-09931 (except 09903)
Tar sands	06600-06601
Operation of gas plants and oil wells	06300, 06500
Coal mining	06100-06110
Meat and poultry packing	10100-10300
Food and beverage	10500-14700
Wood and building products	25100-27402
Printing and publishing	28600-28900
Metal products	29100-33200
Non-metallic minerals	34100-35604
Petro-chemical	35900-37903
Construction of buildings	40400-40402
Construction of roads etc.	40601-40609
Construction of utilities	40901-40912
Special trades	42100-42185
Air services	50100-50203
Railways	50600-50607
Trucking	50701-50715
Pipeline operation	51500-51508
Radio, television	54300-54301
Telecommunications	54402-54501
Electric power	57200
Gas distribution	57400
Machine sales, service	62300-62307
Warehouse, wholesale	62900-62908
Food stores	63100-63103
Department stores	64200
Automotive	65200-65810
Furniture, appliances	67601-67603
Liquor stores	69600-69601
Other retail	66300-69919 (except furniture, appliances, liquor stores)
Education	80101-80504
Hospitals	82100-82103
Care of young, old, infirm	82800-82812

Sports, entertainment	85100-85934
Business services	86100-86202, 86600-86931
Engineering services	86400-86416
Hotels, restaurants	87500-87510
Personal services	87100-87402, 87600-87906
Building maintenance	89701-89708
Government boards and agencies	93104-93115
Government of Alberta	93200
Village, town	95100-95101
Municipality, county	95102-95103
City	95104
Other local government	95105-95108

Note: These codes are modifications of S.I.C. codes, in that a 2-digit extension has been added by the WCB for their industry classification system. More details regarding what industries are included in these groupings can be obtained from Research and Information Development.